

Commission the frustrations and wasted resources necessitated by incompatibility.

The adoption of the EIA/ANSI 563 standard will benefit (on their next purchase of a TV or VCR) the 22 million U.S. households that currently have addressable, analog descramblers. To be successful, EIA/ANSI 563 requires the cooperation of consumer electronics manufacturers, cable operators, and cable descrambler manufacturers.

In the past, converter/descrambler suppliers have been the least enthusiastic about EIA/ANSI 563, because of the potential loss of incremental revenues sparked by the use of a lower cost version of what they already sell. These manufacturers should take comfort in the fact that cable operators will be able to spend more for program protection circuitry inside the set-back descramblers, since they no longer will have to purchase tuners, remote controls, channel read-outs, remodulators, etc.

Similarly, consumer electronics manufacturers claim that in the fiercely competitive industry in which they operate, the \$5 increase in cost incurred to implement EIA/ANSI 563 could not be recouped by corresponding price increases. This concern would be eliminated were the Commission to require all manufacturers to implement EIA/ANSI 563 for the good of consumers. In this situation, no single manufacturer derives a competitive advantage or disadvantage.¹⁵

¹⁵ A similar governmental mandate was used recently in the closed-captioning area. See Television Decoder Circuitry Act of (continued...)

Finally, all those who are worried about business disruptions should realize that the sales of TVs and VCRs are steady and deliberate, such that the requirement to provide EIA/ANSI 563 will not transform businesses overnight. What EIA/ANSI 563 will do, however, is go a long way towards ameliorating the current frustrations consumers experience with their consumer electronics and cable equipment. The Commission should therefore require that all new TVs and VCRs incorporate the EIA/ANSI 563 interface port in their circuitry.¹⁶

In addition, the Commission should marshal the talents of the Joint Engineering Committee to begin work on defining backwards-compatible advanced versions of EIA/ANSI 563 that will keep pace with the technological advances permeating the cable

¹⁵(...continued)
1990, Pub. L. 101-431, 104 Stat. 960 (1990) (requiring that television receivers with picture screens 13 inches or greater in diameter be equipped with built-in decoder circuitry to display closed-captioned television transmissions) ("Decoder Act"). See also Amendment of Part 15 of the Commission's Rules to Implement the Provisions of the Television Decoder Circuitry Act of 1990, 6 F.C.C. Rcd 2419 (1991) ("Decoder Order"); 47 U.S.C. 303(u); 47 C.F.R. 15.119.

Moreover, the EIA/ANSI 563 interface will cost equipment manufacturers no more to implement than the \$5 to \$15 estimated by Congress for the closed captioning interface, see Decoder Order at 2423, and will benefit a larger percentage of the population. Since consumers will ultimately bear the costs for either a set-top descrambler or a set-back descrambler, it makes eminently more sense to promote the less expensive alternative which will not only accommodate scrambling but which will also preserve the features of consumer electronics equipment.

¹⁶ TCI notes that an interface port that is the functional equivalent of EIA/ANSI 563 is already mandated in much of Europe. A similar interface port also appears on many TVs sold in Japan.

industry. This approach will afford consumers the benefits of a standard interface while providing for future upgrades.

III. IMPLICATIONS OF DIGITAL VIDEO COMPRESSION

Cable technology is moving at a rapid pace. The recent announcements by TCI and others to deploy digital video compression and encryption technology within the next two years is but one example of the dynamic changes permeating this industry. In such a rapidly changing technological environment, government standard setting potentially can cause serious disruption. TCI strongly urges the Commission to refrain from imposing any national digital video standard or similar regulatory constraints on cable providers. No one knows or can adequately predict how this technology will develop; thus, extensive government involvement at this point could inadvertently derail the dramatic progress being made and seriously threaten U.S. competitiveness in the digital video arena.

Instead, the Commission should adopt a cautious approach with respect to digital video's effect on the compatibility issues addressed in this proceeding. This approach is consistent with Section 17's vision to have the Commission

periodically review and, if necessary, modify the regulations issued pursuant to this section in light of any actions taken in response to such regulations and to reflect improvements and changes in cable systems, television receivers, video cassette recorders, and similar technology.¹⁷

¹⁷ 1992 Cable Act § 17(A)(d) (emphasis added).

In addition, the long-term approach proposed by TCI in these Comments is fully consistent with the emergence of digital video technology. Since the EIA/ANSI 563 interface represents a modular approach towards signal security, this same concept could be applied in a digital world when digital TVs and VCRs are introduced. In fact, there are industry committees currently working on decoder interface adapters for Advanced Television. Of course the technical details will have to be worked out by joint EIA/NCTA committees, just as they were for the analog EIA/ANSI 563 standard. But there is every reason to believe such a digital standard will be developed. Thus, the Commission's expressed inclination to "develop[] rules that provide the least possible obstacle to technical improvements in both cable television and consumer electronics ..." ¹⁸ is precisely the circumspect approach which should be pursued with respect to emerging digital technologies.

IV. THIRD-PARTY PROVISION OF CONVERTERS AND REMOTE CONTROLS

Section 17 instructs the Commission to promote availability of consumer-owned remote controls and converter boxes that could be purchased from retail outlets. ¹⁹ There are several pressing issues the Commission should keep in mind when crafting its rules in this area.

¹⁸ Notice at ¶ 17.

¹⁹ 1992 Cable Act § 17(A)(c)(2)(C).

First, the Commission must distinguish "converters" and "descramblers" for purposes of Section 17(A)(c)(2)(C). Contrary to the suggestions of some who would have the Commission improperly define these two terms as synonyms, a "converter" is a device that provides advanced tuning functionality, whereas a "descrambler" is a device that decodes video signals that have been scrambled by the cable operator. Section 17(A)(c)(2)(C)'s reference to "converters" does not encompass descrambler units. To construe this provision in any other way and thereby promote the commercial availability of descrambling circuitry would be very injurious to cable operators and, ultimately, consumers. It also would be inconsistent with the Congressional recognition of the cable operators' need to protect the security of its signals.²⁰ Regardless of what the Commission decrees with respect to converters, it must preserve cable operators' right to maintain unrestricted control of the descrambling circuits that are essential to the cable business. Any loss of control in this area would signify a corresponding loss of signal protection. Third-party descrambler manufacturers would have much less incentive than cable operators to invest in box designs that maximize signal security. Moreover, consumers and signal pirates would be less reluctant to tamper with their own hardware than with equipment provided by the cable operator.

Second, the deregulation of converters also raises serious issues. Those clamoring for the publication of technical

²⁰ See supra, at fn. 12.

specifications to make open-architecture cable converters possible argue, for example, that this would allow "subscribers who only care about changing channels [to] buy cheap converters made in Indonesia" whereas those requiring advanced functionality could pay more for more sophisticated boxes.²¹ However, in the absence of some performance standards, it is foreseeable that consumer confusion about the quality of service would occur. Further, third-party vendors would have neither the obligation nor the incentive to reduce signal leakage or ingress as do cable operators; rather their main incentive would be to reduce costs to maximize revenues.

Finally, it will be difficult for the cable operator to "specify the types of remote control units that are compatible with the converter box supplied by the cable operator"²² except in the most general terms. It is unreasonable to expect cable operators to publish a list of model numbers of units or even specific types of units. New devices are continually becoming available and many operators would have neither the time, support staff, or resources to monitor this ever-expanding market with anything approaching sustained accuracy.

²¹ Michael Schrage, "It's Time for Viewers to Get Control of Their Cable TV Converter Boxes," Washington Post, February 12, 1993, at B3.

²² See 1992 Cable Act § 17(A)(c)(2)(D)(ii).

CONCLUSION

For the foregoing reasons, TCI respectfully recommends that the Commission adopt rules for achieving compatibility between cable systems and consumer electronics equipment consistent with the Comments herein.

Respectfully submitted,
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A handwritten signature in dark ink, appearing to read "Michael H. Hammer", is written over a horizontal line.

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March 22, 1993

ATTACHMENT A

